

Application No.: 10/645,259
Response dated: October 16, 2006
Reply to Office Action dated: June 16, 2006

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AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An actuator, comprising: an actuator element physically supported by and coupled to a suspension element at at least one application site of a bonding agent, the bonding agent covered by a coating application, wherein the actuator element is a micro-actuator.
2. (Cancelled)
3. (Currently Amended) The actuator of ~~claim 2~~ claim 1, wherein the micro-actuator is selected from a group consisting of a piezoelectric micro-actuator, an electromagnetic micro-actuator, an electrostatic micro-actuator, a capacitive micro-actuator, a fluidic micro-actuator, or a thermal micro-actuator.
4. (Original) The actuator of claim 1, wherein the bonding agent is a silver paste.
5. (Original) The actuator of claim 1, wherein the coating application has a glass transition temperature greater than 120 degrees Celsius.
6. (Original) The actuator of claim 1, wherein the coating application has a Young's modulus greater than 0.6G Pa.

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7. (Original) The actuator of claim 1, wherein the coating application is an epoxy agent.
8. (Original) The actuator of claim 7, wherein the epoxy agent contains a filler ingredient.
9. (Original) The actuator of claim 8, wherein the filler ingredient is selected from a group consisting of metal, glass, or a fiber material.
10. (Original) The actuator of claim 1, further comprising a step element to maintain a parallel spatial relationship between the actuator element and the suspension element.
11. (Original) The actuator of claim 10, wherein the step element is created by thickening a portion of the actuator element.
12. (Original) The actuator of claim 10, wherein the step element is coupled to a portion of the actuator element.
13. (Currently Amended) A system, comprising:
 - an actuator element;
 - a suspension element coupled to and supporting the actuator element by at least one application site of a bonding agent, the bonding agent covered by a coating application wherein the bonding agent is a silver paste.

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14. (Original) The system of claim 13, further comprising a magnetic head element coupled to the suspension element by at least one application site of a bonding agent, the bonding agent covered by a coating application.
15. (Original) The system of claim 13, wherein the actuator element is selected from a group consisting of a piezoelectric micro-actuator, an electromagnetic micro-actuator, an electrostatic micro-actuator, a capacitive micro-actuator, a fluidic micro-actuator, or a thermal micro-actuator.
16. (Original) The system of claim 15, wherein the micro-actuator is a piezoelectric micro-actuator.
17. (Original) The system of claim 13, further comprising a slider element coupled to the actuator element.
18. (Original) The system of claim 13, further comprising a hard drive to be read by the slider element.
19. (Cancelled)
20. (Original) The system of claim 13, wherein the coating application has a glass transition temperature greater than 120 degrees Celsius.

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21. (Original) The system of claim 13, wherein the coating application has a Young's modulus greater than 0.6G Pa.
22. (Original) The system of claim 13, wherein the coating application is an epoxy agent.
23. (Original) The system of claim 22, wherein the epoxy agent contains a filler ingredient.
24. (Original) The system of claim 23, wherein the filler ingredient is selected from a group consisting of metal, glass, or a fiber material.
25. (Original) The system of claim 13, further comprising a first step element to maintain a parallel spatial relationship between the actuator element and the suspension element.
26. (Original) The system of claim 25, wherein the first step element is created by thickening a portion of the actuator element.
27. (Original) The system of claim 26, wherein a second step element is molded into the suspension element.
28. (Original) The system of claim 25, wherein the first step element is coupled to a portion of the actuator element.

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29. (Original) The system of claim 28, wherein a second step element is coupled to a portion of the suspension element.

30. (Original) The system of claim 25, wherein the first step element is molded into the suspension element.

31. (Original) The system of claim 25, wherein the first step element is coupled to a portion of the suspension element.

32. (Original) The system of claim 25, wherein the first step element is coupled to a portion of the suspension element using one of a group of materials comprising epoxy, resin, anisotropic conductive film, and anisotropic conductive adhesive.

33. (Original) The system of claim 25, wherein the first step element is coupled to a portion of the micro-actuator element using one of a group of materials comprising epoxy, resin, anisotropic conductive film, and anisotropic conductive adhesive.

34-52 (Cancelled)

53. (New) An actuator, comprising: an actuator element physically supported by and coupled to a suspension element at least one application site of a bonding agent, the bonding

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agent covered by a coating application further comprising a step element to maintain a parallel spatial relationship between the actuator element and the suspension element

54. (New) The actuator of claim 53, wherein the actuator element is a micro-actuator.
55. (New) The actuator of claim 54, wherein the micro-actuator is selected from a group consisting of a piezoelectric micro-actuator, an electromagnetic micro-actuator, an electrostatic micro-actuator, a capacitive micro-actuator, a fluidic micro-actuator, or a thermal micro-actuator.
56. (New) The actuator of claim 53, wherein the bonding agent is a silver paste.
57. (New) The actuator of claim 53, wherein the coating application has a glass transition temperature greater than 120 degrees Celsius.
58. (New) The actuator of claim 53, wherein the coating application has a Young's modulus greater than 0.6G Pa.
59. (New) The actuator of claim 53, wherein the coating application is an epoxy agent.
60. (New) The actuator of claim 59, wherein the epoxy agent contains a filler ingredient.

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61. (New) The actuator of claim 60, wherein the filler ingredient is selected from a group consisting of metal, glass, or a fiber material.
62. (New) The actuator of claim 53, wherein the step element is created by thickening a portion of the actuator element.
63. (New) The actuator of claim 53, wherein the step element is coupled to a portion of the actuator element.